**IT Applications Unit 3, AOS 2, Organisations and Data Management**

**Developing a RDMS, p 113-119**

**In creating the database the following is carried out:**

Creating the tables and relationships

Setting up the queries

Input forms

Creating macros

**Testing the solution, p 115**

1. Why is testing carried out?

Testing is carried out so that you can check if you have done the table correctly or not.

1. Distinguish between informal and formal testing.

Informal testing occurs during the development phase whereas Formal testing tests the overall solution.

1. Formal testing:
   1. Bench Test
      1. What does a bench test entail?

A bench test forms part of the formal testing process in which sample data is used to determine how the solution behaves with the range of data.

* 1. Describe User acceptance testing.

User acceptance testing is when you make sure that the formulas and functions work in the solution and that it meets the actual needs of the intended user.

1. Testing validation
   1. Testing should test the boundaries of the validation rule. What does this mean?

Testing validation ensures that the data is accurate before data is entered via forms or queries are run. It is important in the testing process to choose data that will test the boundaries of the validation rule as well as the data type itself. For example, if the validation rule was set to check for a value between 5 and 10 inclusive, then the test data values would be 4, 5, 6 and 9, 10, 11. A simple rule of thumb is to test a value before the value itself and one value greater than the value in the validation rule.

1. Testing the query

Queries need to be tested to ensure that they work correctly. Once you have created a set of test data, manually check the test data to identify the records that meet the criteria specified in the query. The test data must be chosen carefully to ensure that there are records that should be returned by the query, some that should be rejected for failing to meet the first criterion, even though they meet the second criterion, some that fail to meet the second criterion after meeting the first criterion, and finally some that miss both criteria.

1. Testing formulas

Regardless of the location of formulas, each one needs to be tested. It is a matter of choosing appropriate test data for which is easy to determine if the final result is accurate or not.

1. During which stage of the PSM does testing take place?

PSM takes place during the development stage.

1. Why is testing performed during this stage?

Testing is performed during this stage to see if the solution behaves according to expectations.